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### Journal Mission

The mission of *Journal of Computational Physics* is to publish (i.e., to announce, to send forth, to put into circulation) material that will assist in the reliable and accurate computation of scientific problems, especially those in the physical and engineering sciences. To qualify for publication a paper needs to meet criteria of suitability, correctness, significance, and presentation. The mission of *JCP* is not to validate research and then to archive it in a form that improves the author's chances of tenure or promotion.

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- describe a method that can achieve some task not previously possible, or
- describe a method that improves substantially on either the accuracy or the efficiency of previous methods, or
- extend an established method to make it more widely applicable, or
- analyze an existing method to give greater insight or confidence in its use, or
- develop discrete models of some significant physical problem, or
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2. I. Gohberg, P. Lancaster, and L. Rodman, *Matrix Polynomials* (Academic Press, New York, 1982), p. 54.
3. R. Gross, M. Koyanagi, H. Seifert, and R. P. Huebener, Article title, in *Proceedings, 17th Int. Conf. on Low Temperature Physics, Karlsruhe, West Germany, 1984*, edited by U. Eckern *et al.* (North-Holland, Amsterdam, 1984), p. 431.

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